

Case Study 597

Spiral Freezer

Ice cream



THE CUSTOMER

Mackie's of Scotland has been producing luxury ice cream using milk and dairy from its own herd since 1986 from its fourth generation family farm in Aberdeenshire. Mackie's ice cream is no.1 in Scotland and firmly established as one of the top 5 of UK's most popular take-home ice creams.

THE REQUIREMENT

With an impressive and inspiring goal to become the most environmentally friendly company in the UK, Mackie's of Scotland has invested £4.5 million in new technology and development of its dairy. The recent freezer replacement project from Starfrost forms part of the large scale green initiative implemented by Mackie's of Scotland.

THE SOLUTION

Starfrost have provided the dairy with energy efficient freezing technology that meets the ice cream producers long term plan while delivering improved product quality results. The Helix spiral freezer is a low carbon design that uses eco-friendly CO2 as a refrigerant, which has no impact on global warming or ozone depletion in comparison to HCHC's. The energy saving design of spiral freezer allows Mackie's production team to freeze at precisely correct temperatures and control the airflow of the system, using only required refrigeration and power. The spiral freezer features a dual drum for maximum processing capacities and is designed to freeze over 40 2 litre tubs of ice cream per minute, with an ability to process varying sizes of product which provides Mackie's with opportunities to develop and diversify production in the future.

Yzanne Turbett, Project Manager of Mackies of Scotland

"The importance of consistent, rapid freezing is fundamental to the quality of frozen products, therefore the freezing system and the technology we selected was vital. The new Starfrost system means that we now have the most efficient spiral freezer design combined with high performance freezing. The results are improved texture and consistency of Mackie's of Scotland ice cream, as proven in our taste trial results."

